

ABSTRACT

A control method of an EGR system of an engine capable of effectively performing an EGR control at a time of rapid acceleration. For this purpose, an intake air flow rate of the engine is obtained, and from a target EGR valve opening degree and a difference in pressure in front of and behind the EGR valve, a virtual EGR gas flow rate is arithmetically operated. A virtual EGR rate is obtained from the intake air flow rate, the fuel flow rate and the virtual EGR gas flow rate, and a difference from or a ratio to a target EGR rate obtained from the engine speed and the fuel flow rate is obtained. A command EGR valve opening degree is obtained from an EGR valve opening degree correction coefficient obtained from the difference or the ratio, and the target EGR valve opening degree, whereby the EGR valve is driven.